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an adapter having an outer tapered surface configured with a substantially horizontal rearward land section and a substantially horizontal forward land section, said rearward and forward land sections each having a substantially vertical wall configured to facilitate transmission of lateral forces acting on the tooth assembly; and

an excavating tooth configured for attachment to the adapter and having a hollow mounting end defining a cavity configured to mate with the adapter, said hollow mounting end including an inner tapered surface adapted to mate with said outer tapered surface of the adapter, said inner tapered surface configured with a substantially horizontal rearward transmitting section adapted to mate with said rearward land section of the adapter, and a substantially horizontal forward transmitting section adapted to mate with said forward land section of the adapter, said rearward and forward transmitting sections each having a substantially vertical wall configured to mate with the [corresponding] substantially vertical walls [of] on the rearward and forward land sections of said adapter to facilitate transmission of the lateral forces from the excavating tooth to the adapter.

Please amend Claim 2 as follows:

2. (Amended) The assembly of claim 1 wherein the substantially vertical walls of the forward land section and the forward transmitting section correspondingly diverge at least partially from a plane normal to [the] a longitudinal centerline of the adapter, and the substantially

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vertical walls of the rearward land section and the rearward transmitting section correspondingly diverge at least partially from [a] the plane normal to the longitudinal centerline of the adapter, thereby facilitating transmission of the lateral forces from the excavating tooth to the adapter.

Please amend Claim 3 as follows:

3. (Amended) The assembly of claim 2 wherein the substantially vertical walls of the forward land section and the forward transmitting section define [the] a same generally semi-circular shape, and the substantially vertical walls of the rearward land section and the rearward transmitting section define [the] a same generally semi-circular shape.

Please amend Claim 5 as follows:

(Amended) The assembly of claim 1 wherein a forward end portion of said [nose piece] adapter diverges at least partially from a plane normal to [the] a longitudinal centerline of said [nose piece] adapter, and said cavity in the excavating tooth further comprises a correspondingly forward end portion in abutting relationship with the forward end portion of the adapter to facilitate transmission of lateral forces from the excavating tooth to the adapter.

Claim 6, line 3, change "nose piece" to --adapter--.

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Claim 9, line 15, after "tooth" insert --to--

Please amend Claim 10 as follows:

10. (Amended) The assembly of claim 9 wherein the vertical walls of the forward land section and the forward transmitting section define [the] a same generally semi-circular shape, and the vertical walls of the rearward land section and the rearward transmitting section define [the] a same generally semi-circular shape.

Claim 11, line 3, change "nose piece" to --adapter--

Claim 12, line 4, change "nose piece" to --adapter--

Please amend Claim 13 as follows:

13. (Amended) The assembly of claim 9 wherein said forward and rearward land sections are formed in an upper, outer tapered surface of the adapter, and said forward and rearward transmitting sections are formed in an upper, inner tapered surface of the excavating tooth, and further comprising [corresponding] second forward and rearward land sections formed in a lower, outer tapered surface of the adapter, and [corresponding] second forward and rearward transmitting sections formed in a lower, inner tapered surface of the excavating tooth, with the

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second forward and rearward land sections on the adapter being adapted to mate with the second forward and rearward transmitting sections on the excavating tooth so as to effect transference of forces from said tooth to said adapter.

Claim 14, line 12, change "nose piece" to --adapter--.

Please amend Claim 15 as follows:

15. (Amended) ~~The assembly of claim 14 wherein said land section comprises a vertical wall diverging at least partially from a plane normal to [the] a longitudinal centerline of said [nose piece] adapter, and said transmitting section further comprises a corresponding vertical wall in abutting relationship therewith to facilitate transmission of lateral forces from the excavating tooth to the adapter.~~

Please amend Claim 16 as follows:

16. (Amended) ~~The assembly of claim 15 wherein said vertical walls are generally shaped in the form of a semi-circle at least partially surrounding [the associated] said bore in said adapter and said hole defined in said tooth.~~

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Please amend Claim 18 as follows:

18. (Amended) The assembly of claim 14 wherein a forward end portion of said [nose piece] adapter diverges at least partially from a plane normal to [the] a longitudinal centerline of said [nose piece] adapter, and said cavity in the excavating tooth further comprises a corresponding forward end portion in abutting relationship with the forward end portion of the adapter to facilitate transmission of lateral forces from the excavating tooth to the adapter.

Claim 19, line 3, change "nose piece" to --adapter--.

Claim 20, line 2, delete "and positioned";

line 6, delete "vertical" insert --the--.

Please amend Claim 21 as follows:

21. (Amended) The assembly of claim 14 wherein said land section is formed in an upper, outer tapered surface of the adapter, and said transmitting section is formed in an upper, inner tapered surface of the excavating tooth, and further comprising a [corresponding] second land section formed in the lower outer tapered surface of the adapter and through which said bore extends, and a [corresponding] second transmitting section formed in a lower inner tapered surface of the excavating tooth and through which a second hole extends to act in conjunction

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with said bore in the adapter.

Please amend Claim 22 as follows:

22. (Amended) The assembly of claim [21] 14 further comprising a pair of opposed, substantially horizontal forward land sections formed in corresponding upper and lower outer tapered surfaces of the adapter and [positioned] forwardly of said bore defined in said adapter, and further comprising a pair of opposed, substantially horizontal forward transmitting sections formed in corresponding upper and lower inner tapered surfaces of the excavating tooth forwardly of said hole defined by said tooth, said forward land sections and forward transmitting sections being adapted to mate with each other in abutting relationship to further facilitate transmission of [vertical] the forces from the excavating tooth to the adapter.

Please amend Claim 23 as follows:

23. An excavating tooth assembly comprising:  
an adapter having an outer tapered surface configured with a substantially horizontal land section protruding outwardly therefrom and through which a bore extends, said land section having a vertical wall diverging at least partially from a plane extending generally normal to [the] a longitudinal centerline of said [nose piece] adapter;  
an excavating tooth having a cutting end and a hollow mounting end defining a cavity

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configured to [mate] permit said tooth to be positioned in mating relationship with the adapter,  
said hollow mounting end including an inner tapered surface adapted to mate with said outer  
tapered surface of the adapter, said inner tapered surface configured with a recess defining a  
substantially horizontal transmitting section through which a hole extends to act in conjunction  
with said bore [of] defined by the adapter, said transmitting section being configured to mate with  
the land section of the adapter in abutting relationship to facilitate transmission of vertical forces  
from the excavating tooth to the adapter, and having a vertical wall corresponding to the vertical  
wall of the land section on said adapter to facilitate transmission of lateral forces from the  
excavating tooth to the adapter; and

a fastener [extending through] arranged within said bore defined by said adapter and said  
hole defined by said tooth for securing said excavating tooth to said [nose piece] adapter.

Please amend Claim 24 as follows:

24. (Amended) The assembly of claim 23 wherein said vertical walls on said land section of  
said adapter and said transmitting section on said excavating tooth are generally shaped in the  
form of a semi-circle at least partially surrounding the [associated] bore in said adapter and said  
hole in said excavating tooth.

Claim 25, line 3, change "nose piece" to --adapter--.

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Please amend Claim 26 as follows:

26. (Amended) The assembly of claim 23 further comprising a substantially horizontal forward land section formed in the outer tapered surface of the adapter [and positioned] forwardly of said bore, and a substantially horizontal forward transmitting section formed in the inner tapered surface of the excavating tooth forwardly of said hole, said forward land section and forward transmitting section being adapted to mate with each other in abutting relationship to further facilitate transmission of [vertical] the forces from the excavating tooth to the adapter.

Please amend Claim 27 as follows:

27. (Amended) The assembly of claim [24] 23 wherein said land section is formed in an upper, outer tapered surface of the adapter, and said transmitting section is formed in an upper, inner tapered surface of the excavating tooth, and further comprising a [corresponding] second land section formed in the lower outer tapered surface of the adapter and through which said bore extends, and a [corresponding] second transmitting section formed in the lower inner tapered surface of the excavating tooth and through which a second hole extends to act in conjunction with said bore defined by said adapter.

Please amend Claim 28 as follows:

28. (Amended) The assembly of claim [24] 23 further comprising a pair of opposed,

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substantially horizontal forward land sections formed in corresponding upper and lower outer tapered surfaces of the adapter [and positioned] forwardly of said bore, and further comprising a pair of opposed, substantially horizontal forward transmitting sections formed in corresponding upper and lower inner tapered surfaces of the excavating tooth forwardly of said hole defined by said tooth, said forward land sections and forward transmitting sections being adapted to mate with each other in abutting relationship to further facilitate transmission of [vertical] the forces from the excavating tooth to the adapter.

Please amend Claim 29 as follows:

29. (Amended) An assembly for releasably attaching an excavating tooth [in a row of teeth] to an excavating implement, comprising:

an adapter having a base portion attachable to the excavating implement and a nose portion extending forwardly from the base portion, said nose portion having laterally spaced sides and converging upper and lower surfaces terminating at a forward end, [with the base portion of the] said adapter defining an elongated aperture open at opposite ends, and with the upper and lower surfaces of said adapter defining, in combination, at least three generally parallel support surfaces, each support surface opening to the forward end of the adapter, with each support surface being at least partially surrounded by a generally vertical stabilizing surface extending normal to and between [the] a support surface and the respective upper and lower [surface]

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surfaces of the adapter, with each [stabilizing] support surface having a lateral width less than the [lateral] spacing between the sides of the nose portion of the adapter;

[an] said excavating tooth defining a blind cavity configured to snugly fit endwise about the nose portion of the adapter, with the blind cavity defined by said tooth having upper and lower surfaces that [compliment] complement the upper and lower surfaces of said nose portion of the adapter and include structure for abutting and cooperating with the three support surfaces on the adapter, and wherein the generally vertical stabilizing surface at least partially surrounding each support surface of the adapter being adapted to abut in a mating relationship with said structure on said tooth to transfer side load forces imparted to the tooth toward a centerline of the adapter, said tooth further defining a pair of axially aligned openings that open to the cavity of the tooth and operate in conjunction with the elongated aperture defined by the adapter; and

pin structure extendable through the openings in the tooth and through the aperture in said adapter to releasably hold the tooth to the adapter.

Please amend Claim 30 as follows:

30. (Amended) An assembly for attaching an earth engaging tooth to a ground engaging implement, comprising:

a support having a base attachable to the implement and a nose extending forwardly from the base, said nose having laterally spaced sides and converging upper and lower surfaces

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terminating at a forward end, said [base of the] support defining an elongated aperture open at opposite ends, and with the upper and lower surfaces defining, in combination, at least three generally parallel support surfaces, with each support surface opening to the forward end of the support and is at least partially surrounded by a [generally] stabilizing surface extending generally normal to and between [the] a respective support surface and the respective upper or lower [surface] surfaces of the support;

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said tooth having a blind cavity including upper and lower [surface] surfaces that complement the upper and lower [surface] surfaces of said nose of the support [and include], with said upper and lower surfaces of said blind cavity including structure for abutting and cooperating with the three support surfaces on the support, and wherein the stabilizing surface at least partially surrounding each support surface [of] on the support being adapted to abut in mating relationship with said structure on said upper and lower surfaces of the cavity defined by said tooth to facilitate transference of forces imparted to said tooth during an excavating operation to said support, said tooth further defining a pair of axially aligned [openings that open] holes opening to the cavity in the tooth and which act in conjunction with the elongated aperture defined by said support; and

pin structure extendable through the [openings] holes in the tooth and through the elongated aperture in said support to releasably hold the tooth to the support.

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Please amend Claim 31 as follows:

31. (Amended) An assembly for attaching a ground engaging tooth to a ground engaging implement comprising:

a support attachable at a rear end to the implement and having a nose extending forwardly to a free terminal end, said nose having laterally spaced and opposed sides and upper and lower surfaces converging toward the terminal end of said support, with the nose of said support further defining an opening extending through the nose of the support toward the rear end thereof and which is open at opposite ends, said upper and lower surfaces on said support each defining a pair of fore-and-aft spaced support surfaces, with each support surface having a lateral width less than the [distance] spacing between said opposed sides of said support and opening to the terminal end of said support, each support surface [includes] including a stabilizing surface extending in at least partially surrounding and normal relation relative to and between the support surface and the respective upper and lower surfaces of the support;

said tooth defining a blind cavity configured to snugly fit endwise about the nose of the [adapter] support and including upper and lower surfaces that complement the upper and lower surfaces on the nose of the support, with the upper and lower surfaces of the blind cavity each including first and second structures for abutting and cooperating with the pairs of support surfaces on the upper and lower surfaces of the support, with the stabilizing surface of each support surface on the support being adapted to abut in mating relationship with said structures

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on the tooth to transfer side loads imparted to the tooth [to the] toward a center of the support,  
said tooth further defining a pair of [openings] holes arranged in axially aligned relation relative to  
each other and along a centerline passing through the blind cavity in the tooth to act in  
conjunction with the opening in the support; and

pin structure extendable through the [openings] holes in the tooth and the [aperture]  
opening in said support for releasably attaching said tooth to said support.

9/10  
Please amend Claim 32 as follows:

32. (Amended) An assembly for attaching a ground engaging tooth to a ground engaging  
implement, comprising:

a support attachable at a rear end to the implement and having a nose extending forwardly  
to a free terminal end with a forwardly projecting curvilinear configuration, said nose having  
laterally spaced and opposed sides and upper and lower surfaces converging toward the terminal  
end of said support, said support further defining an opening extending through the support  
toward [the] a rear end [thereof] of the nose of the support and which is open at opposite ends,  
said upper and lower surfaces each defining first and second fore-and-aft spaced and vertically  
aligned pairs of support surfaces, with each support surface having a lateral width less than the  
[distance] spacing between said opposed sides of said support, with the first pair of support  
[surface] surfaces on the upper and lower surfaces of the support extending rearwardly from [an

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d] and opening to the terminal end of the support and with the second pair of support [surface] surfaces on the upper and lower surfaces of the support being disposed toward [the] a rear end of the nose of the support, each support surface on said support including a stabilizing surface extending at least partially in surrounding and normal relation relative to and between the support [surface] surfaces and [the] respective upper and lower surfaces of the support;

    said tooth defining a blind cavity configured to snugly fit endwise about the nose of the [adapter] support and including upper and lower surfaces that complement the upper and lower surfaces on the nose of the support, wherein the blind cavity of the tooth defines a curvilinear surface that is a mirror image of the curvilinear [surface of] configuration at the terminal end of the support such that the tooth is subject to self-centering in response to horizontal loads being applied thereto, and with the upper and lower [surface] surfaces of the blind cavity each including first and second pairs of structures for abutting and cooperating with the first and second pairs of support surfaces on the upper and lower surfaces of the support, and wherein the stabilizing surface of each support surface on the support being adapted to abut in mating relationship with the structures on the tooth to transfer side loads imparted to the tooth [to the] toward a center of the support, said tooth further defining a pair of [openings arranged along a centerline passing through] axially aligned holes opening to the blind cavity in the tooth and arranged in conjunction with the opening defined by said support; and

    pin structure extendable through the [openings] holes in the tooth and the [aperture]

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opening in said support for releasably attaching said tooth to said support.

Please cancel Claims 33 through 63 in their entirety.

Please add new Claims 64 through 78 as follows:

*DW/BP*  
--64. An excavating tooth for a ground engaging implement comprising:

an elongated wedge shaped member defining a longitudinal axis and having a forward end extending generally transverse to the longitudinal axis and a blind cavity opening to a rear end of said member, said wedge shaped member defining a pair of axially aligned holes disposed along an axis which passes through said blind cavity, and wherein said blind cavity includes upper and lower tapered surfaces converging toward a forward end of said cavity, with each tapered surface having a rearwardly disposed substantially horizontal transmitting section defined by a recess in the tapered surfaces of the blind cavity and through which one of said holes defined by said tooth extends. --.

--65. The excavating tooth according to Claim 64 wherein each rearwardly disposed horizontal transmitting section on said member opens to a forward end of said cavity and further includes a generally vertical wall diverging at least partially from a plane normal to the longitudinal axis of said member between a support surface extending generally parallel to the longitudinal axis of said

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member and a respective tapered surface defined by said cavity. --.

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--66. The excavating tooth according to Claim 65 wherein said vertical walls are generally shaped in the form of a semi-circle at least partially surrounding a respective support surface. --.

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--67. The excavating tooth according to Claim 64 wherein a forward end portion of said cavity has a concave configuration. --.

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--68. The excavating tooth according to Claim 64 wherein each tapered surface of said blind cavity is provided with a forwardly disposed substantially horizontal transmitting section defined by projections extending from the tapered surfaces of the blind cavity defined by said member. --.

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--69. The excavating tooth according to Claim 68 wherein each forwardly disposed horizontal transmitting section on said member further includes a generally vertical wall diverging at least partially from a plane normal to the longitudinal axis of said member between a support surface extending generally parallel to the longitudinal axis of said member and a respective tapered surface defined by said cavity. --.

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--70. The excavating tooth according to Claim 69 wherein said vertical walls are generally

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shaped in the form of a semi-circle at least partially surrounding a respective support surface. --.

*189*  
-71. An adapter for an excavating implement, comprising:

an axially elongated member defining a longitudinal axis and a pair of outer tapered surfaces converging toward a forward end of the member, with each tapered surface having a rearwardly disposed substantially horizontal land section defined by a projection extending from a respective tapered outer surface on the member, said member further having a bore defining an axis extending generally normal to and intersecting with the horizontal land sections on said member. --.

*20* *19*  
-72. The adapter according to Claim ~~71~~ wherein said bore extends through said member and is open at opposed ends thereof. --.

*189*  
-73. The adapter according to Claim 71 wherein each rearwardly disposed substantially horizontal land section on said member opens to a forward end of said member and further includes a generally vertical wall diverging at least partially from a plane normal to the longitudinal axis of said member between a support surface extending generally parallel to the longitudinal axis of said member and a respective outer tapered surface defined by said member. --.

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22 24  
--24. The adapter according to Claim 23 wherein said vertical walls are generally shaped in the form of a semi-circle at least partially surrounding a respective support surface. --.

23 19  
--25. The adapter according to Claim 24 wherein a forward end portion of said member has an outwardly bowed configuration. --.

24 19  
--26. The adapter according to Claim 25 wherein each tapered surface of said member further includes a forwardly disposed substantially horizontal land section defined by a recess extending inwardly from one of said outer tapered surfaces on said member. --.

25 24  
--27. The adapter according to Claim 26 wherein each forwardly disposed horizontal land section on said member further includes a generally vertical wall diverging at least partially from a plane normal to the longitudinal axis of said member between a support surface extending generally parallel to the longitudinal axis of said member and a respective tapered outer surface on said member. --.

26 25  
--28. The adapter according to Claim 27 wherein said vertical walls are generally shaped in the form of a semi-circle at least partially surrounding a respective support surface. --.

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